

### **Commercial & Industrial Energy Efficiency Programs**

The New Jersey Board of Public Utilities, at its' June 17, 2015 Board Agenda meeting, approved the New Jersey Clean Energy Program's Commercial & Industrial Fiscal Year 2016 compliance filing which runs from July 1, 2015 through June 30, 2016.

The filing contained significant program changes as outlined below. New and increased incentives and some program changes will be effective July 1, 2015. Incentives that are decreasing, along with program changes that require longer lead times in the marketplace, will go into effect on August 1, 2015. If a change has not been noted, the program has not been modified.

#### New incentives and program changes effective July 1, 2015:

#### NJ SmartStart Buildings

#### New Incentives

- LED ENERGY STAR<sup>®</sup> fixtures:
  - o LED Bath Vanity \$5/fixture
  - o LED Cove Mount \$5/fixture
  - o LED Decorative Candle \$5/fixture
  - o LED Decorative: Other \$5/fixture
  - LED Downlight Pendant \$5/fixture
  - o LED Downlight Solid State Retrofit \$5/fixture
  - o LED Downlight Surface Mount \$5/fixture
  - o LED Other \$5/fixture
  - o LED Outdoor Porch Wall Mount \$5/fixture
  - o LED Outdoor Post-Mount \$5/fixture
  - o LED Porch (wall mounted) \$5/fixture
  - o LED Torchiere \$5/fixture
  - o LED Ceiling Mount \$10/fixture
  - LED Close to Ceiling Mount \$10/fixture
  - o LED Decorative Pendant \$10/fixture
  - LED Inseparable SSL Other \$10/fixture
  - LED Security \$10/fixture
  - o LED Wall Scones \$10/fixture
  - o LED Wrapped Lens \$10/fixture



- LED ENERGY STAR lamps:
  - o B10, CA10, F10, G16.5, G25, PAR30L- \$5/lamp
  - o B13, BA10, F15, MRX16, A15, A21 \$10/lamp
- LED Retrofit kits for ambient lighting of commercial spaces
  - o 2x2 LED (Retrofit) \$15/fixture
  - o 1x4 LED (Retrofit) \$15/fixture
  - o 2x4 LED (Retrofit) \$25/fixture
- LED retrofit kits for outdoor pole/arm-mounted decorative luminaires \$50/fixture
- LED retrofit kits for outdoor pole/arm-mounted area and roadway luminaires \$100/fixture
- LED retrofit kits for large outdoor pole/arm-mounted area and roadway luminaires \$150/fixture

#### **Program Guidelines Revisions:**

- Removed pre-inspection and pre-approval installation requirement for specific prescriptive measures (excludes prescriptive lighting, prescriptive lighting controls, performance lighting and custom measures). Applications must be submitted within 12 months of equipment purchase.
- Revised performance lighting program requirements to allow gut rehabs for existing buildings. 100% pre and post inspection required.
- Building shell measures are now eligible for SmartStart custom measures and the IRR (internal rate of return) requirement for has been eliminated.

### Direct Install

- Added series boilers to eligible equipment list (K-12 schools only)
- Increase the capacity of boilers on a one-for-one replacement from 500mbh to 1,500mbh
- The Direct Install program shall allow religious facilities which are metered residentially to be eligible for services under this program

### **Pay for Performance**

- Eliminated IRR requirement (Existing Buildings & New Construction)
- Expanded high energy intensity reduced savings threshold (4%) to hospitals, as well as create tiered incentive for savings above 4% (Existing Buildings)
  - o Base incentive \$0.09/kWh with \$0.005 additional for each % over 4% up to max \$0.11/kWh
  - Base incentive of \$0.90/therm with \$0.05 additional for % over 4% up to max of \$1.25
- Increased cap on lighting savings from 50% up to 70% with increasing minimum source energy/cost savings of 1% for each 1% (Existing Buildings & New Construction)



- Allow TRC autonomy to conduct expedited pre-inspections without appeal/exemption process, rules apply (Existing Buildings)
- Continue working with *Environmental Defense Fund's Investor Confidence Project* (ICP) to develop pilot alternative path (Existing Buildings)

### Local Government Energy Audit

- Established discretionary processes to:
  - Evaluate higher entity caps, up to \$300k, for larger/high-density entities. This will be contingent on a commitment from the entity to participate in the ESIP program.
  - Added rule prohibiting participation in equipment incentive programs while having an LGEA conducted

### Large Energy Users Program

• Eliminated IRR and payback requirement

### Combined Heat & Power/Fuel Cells Program

- Changed small-scale CHP and Waste Heat to Power fixed incentives to be tiered, which creates a tiered incentive structure across all system sizes; does not apply to Fuel Cells.
- Added clarification that incentives are paid per project, per site. Installations of multiple systems planned for the same site within a 12 month period must be combined into a single project.
- Revised filing entity cap language: \$4 million entity cap will apply, \$5 million for facilities doing both comprehensive energy efficiency work through other program(s) and CHP.



## Decreased incentives and program changes effective August 1, 2015:

#### NJ SmartStart Buildings

• Sandy enhancements are discontinued for C&I customers

#### **Incentive Reductions**

- Incentives reduced for the following measures:
  - LED portable lamps from \$20 to \$5 per fixture
  - LED recessed down lights from \$35 to \$5 per fixture
  - LED PAR30/38 from \$10 to \$5 per lamp
  - LED luminaires for ambient lighting for commercial spaces from \$50 per fixture to:
    - 2x2 LED \$15 per new fixture
    - 1x4 LED \$15 per new fixture
    - 2x4 LED \$25 per new fixture
  - LED Outdoor Pole/Arm-Mounted Area and Roadway Reduced from \$175 to \$100 per new fixture
  - o LED Outdoor Pole/Arm-Mounted Decorative Reduced from \$175 to \$50 per new fixture
  - o T5/T8 fixtures replacing HID
    - Categories consolidated/incentives revised
    - \$25.00/Fixture Existing fixtures less than 250 watts
    - \$50.00/Fixture Existing fixtures between 250 and 399 watts
    - \$100.00/Fixture Existing fixtures between 400 and 750 watts
    - \$150.00/Fixture Existing fixtures greater than 750 watts
  - Fluorescent T8 to T8 de-lamping with new reflector incentive reduced from \$15 to \$10 per fixture
  - Standard fluorescent T8 to Reduced Wattage T8 (28W/25W) System reduced from \$10 to \$5 per fixture (New or Retrofit)

#### **Incentive Revisions**

- Revised prescriptive incentive offerings Gas Heating Boilers (see tables)
  - Set efficiency requirements beyond ASHRAE 90.1-2013
  - o Separate efficiencies/incentives for non-condensing and condensing boilers



Boiler Type	Size Category (MBh input)	Prescriptive Non- Condensing	Prescriptive Condensing	
Hot Water	< 300	85% AFUE	93% AFUE	
Hot Water	<u>&gt;</u> 300 and <u>&lt;</u> 2,500	85% Et	91% Et	
Hot Water	> 2,500	85% Ec	93% Ec	
Steam	< 300	82% AFUE	NA	
Steam, all except natural draft	<u>&gt;</u> 300 and <u>&lt;</u> 2,500	81% Et	NA	
Steam, all except natural draft	> 2,500	81% Et	NA	
Steam, natural draft	≥ 300 and <u>&lt;</u> 2,500	79% Et	NA	
Steam, natural draft	> 2,500	79% Et	NA	

Hot Water	Non-Condensing	Condensing
Capacity	Incentive \$/MBh	Incentive \$/MBh
MBh < 300	\$0.95; Min \$400	\$2.00; Min \$1,000
300 <u>&lt;</u> MBh <u>&lt;</u> 1,500	\$1.75	\$2.20; Min \$1,000
1,500 < MBh <u>&lt;</u> 2,500	\$1.50	\$2.20
2,500 < MBh <u>&lt;</u> 4,000	\$1.30	\$2.00
> 4,000 MBh	custom	custom

Steam	Natural Draft	Power Ventilation
Capacity	Incentive \$/MBh	Incentive \$/MBh
MBh < 300	\$1.40; Min \$300	\$1.40; Min \$400
300 <u>&lt; MBh &lt;</u> 1,500	\$1.00	\$1.20
1,500 < MBh <u>&lt;</u> 2,500	\$0.90	\$1.20
2,500 < MBh <u>&lt;</u> 4,000	\$0.70	\$1.00
> 4,000 MBh	custom	custom



- Revised prescriptive incentive offerings Electric Chillers (see tables)
  - Use energy efficiency ratio (EER) as the efficiency metric for air cooled chillers and kW/ton as the efficiency metric for water cooled chillers (per ASHRAE).
  - Aligned the incentive program chiller capacity categories with ASHRAE categories.
  - Established separate incentives for water cooled positive displacement and centrifugal chillers. Separate incentives for constant and variable speed chillers.
  - Revised incentive structure providing a base \$/ton at program minimum efficiencies plus additional \$/ton for exceeding program requirements. Performance Incentives apply for each 0.1 EER above the Incentive Minimum EER or for each 0.01 kW/ton below the Incentive Minimum kW/ton.
  - Limit prescriptive incentives to comfort cooling chiller applications only. Non-comfort cooling chillers (manufacturing, process use, et cetera) will be evaluated through custom.
  - Variable speed equipment must meet minimum full and part load efficiency requirements.

	Pat	th A	Path B		Path A		Path B	
	Incentive	Qualifying	Qualifying	Incentive	Incentive	Qualifying	Qualifying	Incentive
	Minimum	IPLV	Full Load	Minimum	Minimum	IPLV	Full Load	Minimum
Capacity	Full Load	kW/ton	kW/ton	IPLV	Full Load	EER	EER	IPLV
Capacity	kW/ton			kW/ton	EER			EER
Air Cooled								
tons < 150					10.30	13.70	9.70	16.12
tons <u>&gt;</u> 150					10.30	14.00	9.70	16.42
Water Cooled Pos	itive Displa	cement						
tons < 75	0.735	0.600	0.780	0.490				
75 <u>&lt;</u> tons < 150	0.706	0.560	0.750	0.480				
150 <u>&lt;</u> tons < 300	0.647	0.540	0.680	0.431				
300 <u>&lt;</u> tons < 600	0.598	0.520	0.625	0.402				
tons <u>&gt;</u> 600	0.549	0.500	0.585	0.372				
Water Cooled Centrifugal								
tons < 150	0.598	0.550	0.695	0.431				
150 <u>&lt;</u> tons < 300	0.598	0.550	0.635	0.392				
300 <u>&lt;</u> tons < 400	0.549	0.520	0.595	0.382				
400 < tons < 600	0.549	0.500	0.585	0.372				
tons <u>&gt;</u> 600	0.549	0.500	0.585	0.372				



	Constant Speed		Varia	ble Speed		
	Base	Performance	Base	Performance		
	\$/ton	\$/ton	\$/ton	\$/ton		
Air Cooled						
tons < 150	\$20.00	\$3.50	\$90.00	\$4.00		
tons <u>&gt;</u> 150	\$20.00	\$2.75	\$92.00	\$4.00		
Water Cooled Positive Displacement						
tons < 75	\$13.00	\$2.25	\$40.00	\$2.50		
75 <u>&lt;</u> tons < 150	\$20.00	\$2.00	\$43.00	\$2.00		
150 <u>&lt;</u> tons < 300	\$17.00	\$2.00	\$43.00	\$2.00		
300 <u>&lt;</u> tons < 600	\$15.00	\$2.25	\$37.00	\$2.00		
tons <u>&gt;</u> 600	\$30.00	\$2.00	\$44.00	\$2.00		
Water Cooled Centrifugal						
tons < 150	\$24.00	\$2.25	\$12.00	\$4.00		
150 <u>&lt;</u> tons < 300	\$10.00	\$2.00	\$30.00	\$2.50		
300 <u>&lt;</u> tons < 400	\$8.00	\$2.00	\$20.00	\$2.00		
400 <u>&lt;</u> tons < 600	\$8.00	\$2.00	\$25.00	\$2.00		
tons <u>&gt;</u> 600	\$8.00	\$2.00	\$25.00	\$2.00		

### Pay for Performance

- Increased minimum demand for participation to 200kW; 100kW will remain for multi-family facilities only (Existing Buildings)
- Eliminated kW peak demand waiver currently in place for certain facilities (Existing Buildings)
- Eliminated square feet waiver currently in place for certain facilities (New Construction)
- Added rule prohibiting participation in other programs while doing Pay for Performance (Existing Buildings & New Construction)
- Revised partner turn-around time for revisions from 90 days to 30 days (Existing Buildings & New Construction)

#### Local Government Energy Audit

• Raised minimum kW for participation from 150 kW to 200 kW

If you have questions regarding program changes or effective dates, contact TRC at 866-NJSMART (657-6278), extension 2.